

CH359: POLLUTION CONTROL IN CHEMICAL PROCESSES

CREDITS = 4 (L = 4, T=0, P = 0)

1. **ENGINEERING, ETHICS AND ENVIRONMENT:** Ecological systems and pollution. Fundamental definitions of pollution parameters - air and water quality criteria, 6 Hours
2. **STANDARDS AND LEGISLATION:** EIA, EIS and EMP. Air and water pollution management through waste minimization. Industrial air pollution management: air pollution meteorology (Generation, transportation and dispersion of air pollutants). 8 Hours
3. **OUTLINES OF INDUSTRIAL AIR POLLUTION CONTROL:** Selection, design and performance analysis of air pollution control equipment: gravity settling chambers, air cyclones, ESPs, filters and wet scrubbers. 7 Hours
4. **INDUSTRIAL WATER POLLUTION MANAGEMENT:** Wastewater treatment processes; Pre-treatment, primary and secondary treatment processes. Advanced wastewater treatment processes. 6 Hours
5. **DESIGN** of sedimentation tanks and biological treatment processes and advanced pollution control processes. 6 Hours

REFERENCE BOOKS

Title: Pollution Control in Chemical Industries
Author: S P Mahajan
Publisher: Tata McGraw Hill

Title: Industrial Water Pollution Control
Author: Eckenfelder W W
Publisher: Tata McGraw Hill

Title: Environmental pollution control engineering
Author: C S Rao
Publisher: Wiley eastern Ltd.